

METHOD FOR DETECTING LEAK BEFORE RUPTURE IN A PIPELINE

Abstract

A method for leak-before-rupture assessment including using a failure assessment diagram (FAD) assessment curve from a crack initiation based FAD analysis to analyze a crack in a material; and using a ductile tearing analysis in conjunction with the FAD assessment curve to detect a crack exhibiting at least one of ductile tearing stability and tearing instability prone to rupture during growth of the crack.